

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japa

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TITLE : LOW DIELECTRIC CONSTANT AMORPHOUS FLUORINATED CARBON FILM AND ITS MANUFACTURE

ABSTRACT : PROBLEM TO BE SOLVED: To form amorphous fluorinated carbon film to be used as a dielectric insulation layer for an electronic device from a fluorinated ring type hydrocarbon precursor.

SOLUTION: This precursor can be selected from a group consisting of hexafluorobenzen, 1,2-diethynyltetrafluorobenzen and 1,4-bis(trifluoromethyl) benzene. The film is adhered by adhering techniques using radiation or beam such as coating technique using ion beam, coating technique using laser, and chemical gas phase coating technique using plasma. This film is stable against heat in a non-oxidation atmosphere up to 400°C and the dielectric constant is lower than 3.0. Therefore, this film is suited to a use as an insulating body for separating a conductor in a mutual connecting construction.

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